UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/853,769	05/14/2001	Takashi Hotta	500.28166CX2	7218	
24956 7590 11/14/2007 MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER		
			PAN, DANIEL H		
			ART UNIT	PAPER NUMBER	
			2183		
·					
			MAIL DATE	DELIVERY MODE	
			11/14/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.	•			$X_{i}C$
Examiner Daniel Pain 2183 218		Application No.	Applicant(s)	
Daniel Pan 2183 — The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Settlement of the impay be available under the provisions 37 CFR. 1.13(b), in no event, however, may reply be limited from the content of the provision of the communication of		09/853,769	HOTTA ET AL.	
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extension of time may be remisled under the provious of STCR 1.13(8), in to event, however, may reply be timely filled 1 for Centrel for reply is appointed above, the maintain statution, period will apply and will expire SM (5) MONTHS from the realing date of this communication of the communication of the communication, and the provious of the Centrel for reply is application to the displacement of the policidation become ABMODED (5) st. C § 133. Any reply recover by the Office later then here monite after the maining date of this communication, even if the provious any senter desired time adjustment. Sees 9 CPR 1.70(4). Status 1) Sesponsive to communication(s) filled on 28 August 2007. 2a) This action is FINAL. 2b) This action is FINAL. 2b) This action is finad. 2c) This action is FINAL. 2c) This action is final the provided and	Office Action Summary	Examiner	Art Unit	1
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Batherions of lines may be available under the plavabilists of 37 CFR 1.35(a). In or event, however, may a reply be timely lifed - Batherions of lines may be available under the plavabilists of 37 CFR 1.35(a). In or event, however, may a reply be timely lifed - Batherion or give the service and access the maximum statustory paroved unappy and will expire \$X, (b) MONTHS from the mailing date of this communication. - Falure to reply within the set or extended period for reply will, by statute, cause the application to become ARANDONED (35 U.S.C. § 133). Any reply procedure by the Office statute three herealizes and statute, paravilled and accordance with the practice of the communication, even if timely filed, may reduce any statute term applications. - See 37 CFR 1.34(a). - Status 1) Responsive to communication(s) filled on 28 August 2007. 2a) - This action is FINAL. - 2b) - Claim(s) 17-22 and 27-40 is/are pending in the application. - 4a) Of the above claim(s) 1-16 and 23-26 is/are withdrawn from consideration. - 5b) - Claim(s) 27-35 and 37-40 is/are pelected. - 7b) - Claim(s) 17-22 and 36 is/are rejected. - 7b) - Claim(s) 17-22 and 36 is/are rejected. - 7b) - Claim(s) 17-22 and 36 is/are rejected. - 7c) - Claim(s) 17-22 and 36 is/are rejected. - 7c) - Claim(s) 18-25 and 28-26 is/are withdrawn from consideration. - 5application Papers - 9b) - The specification is objected to by the Examiner. - 10b) The drawing(s) filed on 14 May 2001 is/are: a) - allowed. - application Papers - 9b) - The specification is objected to by the Examiner. - 10b) Allowed on the drawing sheet(s) including the correction is required if the drawing(s) is objecte				1
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, PROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of in many be available under the provisions of 37 CRT 1.81(a). In ne event, nower, may a reply be timely filed. If NO period for reply is appelled above, the maximum statutory parted with apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set of excelled period for reply will, by status, cause the application to exceemed standards (7) (23 U.S. C. § 133). Any reply received by the Office laser than these months after the mailing date of the communication, even if timely filed, may reduce any exercised period for reply will, by status, cause the application to exceemed standards (7) (23 U.S. C. § 133). Any reply received by the Office laser than these months after the mailing date of the communication, even if timely filed, may reduce any exercised period for reply as a possibility of the communication. Even if timely filed, may reduce any exercised period for reply as a possibility of the communication. Set 7 ORP 1.79(4). Status 1) Responsive to communication (5) filed on 28 August 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 17-22 and 37-40 is/are rejected. 5) Claim(s) 17-22 and 37-40 is/are rejected. 7) Claim(s) 17-22 and 36 is/are rejected. 7) Claim(s) 27-35 and 37-40 is/are rejected. 8) Claim(s) 17-22 and 36 is/are rejected. 10) The specification is objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing not request that any objection to the drawing(s) to objected to by the Examiner. Applicant may not request that any object		ears on the cover sheet with the	orrespondence addre	9SS
1)	A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDO	ON. timely filed om the mailing date of this comm	
2a) ☐ This action is FINAL. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☐ Claim(s) 17-22 and 27-40 is/are pending in the application. 4a) Of the above claim(s) 1-16 and 23-26 is/are withdrawn from consideration. 5) ☐ Claim(s) 27-35 and 37-40 is/are allowed. 6) ☐ Claim(s) 17-22 and 36 is/are rejected. 7) ☐ Claim(s) ☐ is/are objected to. 8) ☐ Claim(s) ☐ are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 14 May 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12] ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * ○) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No. ☐ 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 4) ☐ Interview Summany (PTO-413) Paper Nots/Mail Date. ☐ 5) ☐ Notice of Informal Patent Application	· · · · · · · · · · · · · · · · · · ·			
3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 17-22 and 27-40 is/are pending in the application. 4a) Of the above claim(s) 1-16 and 23-26 is/are withdrawn from consideration. 5) Claim(s) 27-35 and 37-40 is/are allowed. 6) Claim(s) 17-22 and 36 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 14 May 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some *c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 17-22 and 27-40 is/are pending in the application. 4a) Of the above claim(s) 1-16 and 23-26 is/are withdrawn from consideration. 5) Claim(s) 27-35 and 37-40 is/are allowed. 6) Claim(s) 17-22 and 36 is/are rejected. 7) Claim(s) 27-23 and 36 is/are rejected. 8) Claim(s) 27-35 and 37-40 is/are allowed. 6) Claim(s) 3-2-36 and 37-40 is/are rejected. 7) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filled on 14 May 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. \$ 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. \$ 119(a)-(d) or (f). a) All b) Some *c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 1) Notice of References Cited (PTO-892) 1) Notice of References Cited (PTO-892) 2) Notice of References Cited (PTO-893) 5) Notice of Informal Patent Application	,—		aranautian an ta tha m	orito io
Application of Claims 4) Claim(s) 17-22 and 27-40 is/are pending in the application. 4a) Of the above claim(s) 1-16 and 23-26 is/are withdrawn from consideration. 5) Claim(s) 27-35 and 37-40 is/are allowed. 6) Claim(s) 17-22 and 36 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 14 May 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	•			erits is
4)	·	x parte Quayre, 1000 G.B. 11,	400 0.0. 210.	
4a) Of the above claim(s) 1-16 and 23-26 is/are withdrawn from consideration. 5) □ Claim(s) 27-35 and 37-40 is/are allowed. 6) □ Claim(s) 17-22 and 36 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s)	·			
5) ☐ Claim(s) 27-35 and 37-40 is/are allowed. 6) ☐ Claim(s) 17-22 and 36 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of Partisperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO:SB/08) 5) ☐ Notice of Informal Patent Application	, —			
6) Claim(s) 17-22 and 36 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 14 May 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of Portsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application		withdrawn from consideration		
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of Preferences Cited (PTO-892) 20 Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application				
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 14 May 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.				
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 14 May 2001 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 20 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application		r election requirement.		
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 14 May 2001 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 20 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application		•		
10) ☐ The drawing(s) filed on 14 May 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of Praftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some column None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	· ·			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)				
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08)				1 121/4\
Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08)	- · · · · · · · · · · · · · · · · · · ·			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1.				
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08)	•	priority under 25 H.C.C. & 1100	(a) (d) or (f)	
1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)		priority under 55 0.5.0. § 119	(a)-(u) or (i).	
2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)	·— ·— ·	s have been received		
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 1 ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. ☐ . 5 ☐ Notice of Informal Patent Application			ation No	
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. 5) Notice of Informal Patent Application				age
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. 5) Notice of Informal Patent Application		·		·
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. 5) Notice of Informal Patent Application	* See the attached detailed Office action for a list	of the certified copies not recei	ved.	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. 5) Notice of Informal Patent Application				
Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application Paper No(s)/Mail Date	Attachment(s)			
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application	1) Notice of References Cited (PTO-892)			
	2) Notice of Draftsperson's Patent Drawing Review (P10-948) 3) Notice of Draftsperson's Patent Drawing Review (P10-948)	5) 🔲 Notice of Informa		
		6) Other:		

Application/Control Number: 09/853,769 Page 2

Art Unit: 2183

1. Claims 17-22,27-40 are presented for examination. Claims 1-16, 23-26 have been canceled.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 17-22,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeGroot (4,766,564) in view of Chevillat (4,615,004).
- 3. As to claims 17, 18, 21,22 ,36, DeGroot taught a system comprising at least :
- a) a register for storing data (see fig.1);
- b) a plurality of arithmetic operation units to execute plurality of instructions stored in memory in parallel (see fig.1, ADD, MUL);
- c) a plurality of signal lines for sending data stored in the register to an arithmetic unit (see the output connection 22,24 of the register to the input of ADD and MUL in fig.1);
- d) a second plurality of signal lines for storing.result data from the arithmetic units in register (see output of ADD and MUL to the input of register in fig.1):
- e) a bypass circuit (adder bypass bus and mul bypass bus) for connecting the first and second plurality of signal lines to use data resulting from the arithmetic output for next cycle (see fig.1, see the bypass bus with the switches from the arithmetic units to the instruction, see the control input of the arithmetic units), and the bypass being controlled, by ns of arithmetic instructions in col.3, lines 1-46, see fig.3, see also col.5, lines 17-42 for bypass cycle).

Application/Control Number: 09/853,769 Page 3

Art Unit: 2183

4. DeGroot also included bypass for transferring the data between the different arithmetic units (see the input connection to the switch at each input of the arithmetic units in fig.3, see also limitations already set forth in this action).

- 5. DeGroot did not specifically showed the fetching of the plurality of instructions at one time as claimed. However, Chevillat disclosed a system for fetching plurality of instructions in parallel (see the instructions fetched in single machine cycle in col.7, lines 32-39). It would have been obvious to one of ordinary skill in the art to use Chevillat in DeGroot for including the fetching of plurality of instructions at one time as clamed because the use of Chevillat could provide DeGroot the capability to schedule the processing of instructions in greater number at a given time, thereby increasing the bandwidth of the instruction processing, and it could be readily achieved by configuring the fetching unit of Chevillat into DeGroot with modified system parameters (such as the instruction width, and instruction number) so that' the fetching of plurality instructions could be recognized by DeGroot at a predetermined fetching cycle, and because DeGroot also taught that a greater number of instructions could be executed in a single cycle for faster operation speed (see co1.1, lines 11-20), which an indication the applicability for fetching more instructions in a given time in order to adapt to faster execution speed, and therefore, it would have been recognizable by one of ordinary skill in the art that the instructions fetched in single machine cycle by Chevilla would have provided a solution for the improvement on DeGroot's single cycle execution to achieve a faster operation speed (see DeGroot 's co1.1, lines 11-20) 17. DeGroot is used as primary reference because it shows the detailed structure of the bypass circuit and the connections of the plurality of switches. Chevillat is used to supplement the teaching of the fetching instructions in parallel.
- 6. As to claims 19,20, see the switches with the adder bypass bus and mul/bypass bus in fig.3, see also fig.1, see the bypass bus with the switches from the arithmetic units to the input of the arithmetic units.

Page 4

Application/Control Number: 09/853,769

Art Unit: 2183

- 7. Claims 27-35,37-40 are allowable over the art of record for reciting the combined features of the sequencer, the register for storing data, the plurality of arithmetic units, the first plurality of signals lines, the second plurality of signal lines, the bypass circuit/the switches for transferring data between different arithmetic units when instructions executed by different arithmetic units indicate the same address (27-34), the additional features of the data resulting from operation by the arithmetic unit is not only stored in the register, but also sent to another arithmetic units through the bypass (claim 35), the specific connections of first lines, second lines, third lines, fourth lines, first bypass, ands second bypass (37).
- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a) Kinoshita et al. (4,734,849) is cited for the teaching of the use of plurality of instructions using a plurality of arithmetic units (see fig.3A, see col.7, lines 62-68, col.8, lines 1-18, see col.5, lines 54-68 for instructions from memory).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Application/Control Number: 09/853,769 Page 5

Art Unit: 2183

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan